

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 July 2004 (22.07.2004)

PCT

(10) International Publication Number  
**WO 2004/062075 A3**

(51) International Patent Classification<sup>7</sup>: **H02M 7/5383**,  
H05B 39/04, H02M 3/338

(21) International Application Number:  
PCT/US2003/041512

(22) International Filing Date:  
31 December 2003 (31.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: **31 June 05**  
60/437,584 31 December 2002 (31.12.2002) US

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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

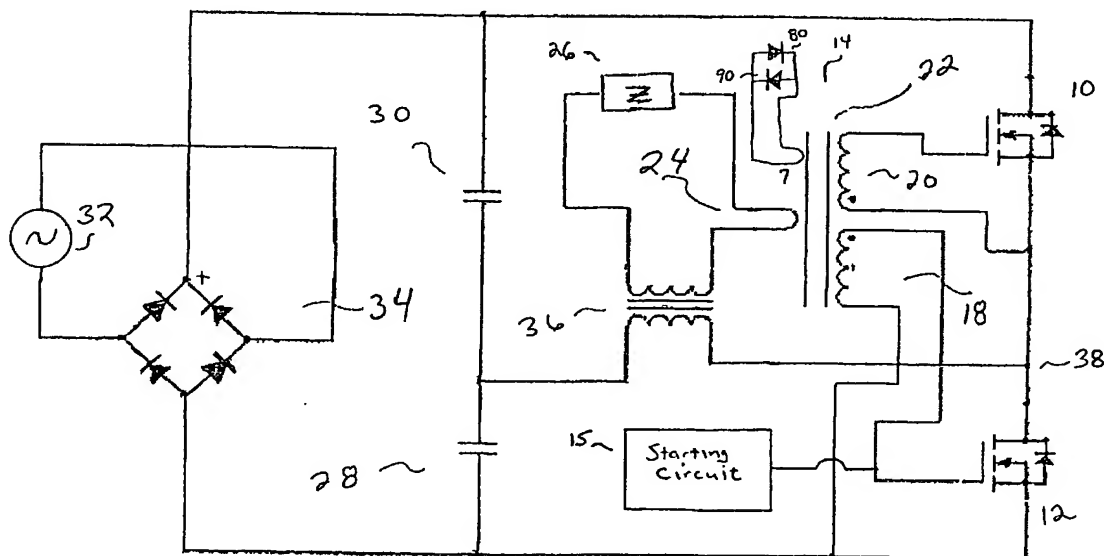
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
2 September 2004

[Continued on next page]

(54) Title: ADAPTIVE RESONANT SWITCHING POWER SYSTEM



(57) Abstract: A resonant switching power system operates with two resonant frequencies. A first frequency depends on the secondary leakage inductance of an output transformer and capacitor. The first frequency varies with changes in the load because load changes alter the leakage inductance. A second resonant frequency depends on the gate source capacitance of two MOSFET power devices in the circuit and the leakage inductance of the circuit's driving transformer. Power is thereby supplied that is always in phase with the load so that switching in the power supply occurs when current is near zero. High thermal efficiency is thereby achieved.

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# INTERNATIONAL SEARCH REPORT

International Application No

PC 03/41512

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H02M7/5383 H05B39/04 H02M3/338

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H02M H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	FR 2 759 240 A (KRS SA) 7 August 1998 (1998-08-07)  abstract figure 2 page 11, line 5 - page 12, line 21	1-7, 9-25, 28, 30
Y	US 5 430 632 A (MESZLENYI IVAN) 4 July 1995 (1995-07-04)  figures 1,2 abstract column 2, lines 13-24, 47-60 column 3, lines 60-65 column 4, lines 8-11	1-7, 9-25, 28, 30, 32
X	----- -/-	26, 27, 29, 31

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Date of the actual completion of the international search

1 July 2004

Date of mailing of the international search report

09/07/2004

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# INTERNATIONAL SEARCH REPORT

International Application No

PCT 03/41512

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International Application No

PC 03/41512

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